

A CASE OF FILARIASIS WITH CHYLURIA*

BY

J. K. OATES

Whitechapel Clinic, The London Hospital

The following case of filariasis is reported because the patient presented at a venereal disease clinic with an unusual urinary abnormality.

A coloured man aged 29 years from British Guiana, who had been resident in England for about 18 months, complained of urethral discharge, and the passage of milky urine with slight dysuria. The milky urine was first noticed 6 weeks before attendance, but at first this symptom was only present intermittently. For the preceding 2 weeks, however, every sample of urine voided had been milky and some bright red blood was often mixed with it. For about a month he had had an aching pain in the left loin, and for one week he had noted slight dysuria and had apparently interpreted the drops of milky urine remaining after micturition as urethral discharge. He had also lost about 2 stones in weight. Previous venereal disease was denied, but he had had intercourse promiscuously several times in the few months before attendance.

Examination.—He was a muscular coloured man who had obviously lost some weight. Firm lymphatic glands were easily palpable in groins and axillae but were probably not enlarged. The genitalia were normal and no urethral discharge was present. There was some tenderness on pressure in the left iliac fossa but no mass could be felt. The remainder of the physical examination revealed no abnormality. The blood pressure was 130/85. The urine was homogeneous, milk-white in colour, and contained a number of gelatinous clots and streaks of blood (Fig. 1). A stained film of the centrifuged urinary deposit showed a number of polymorphonuclear leucocytes, many red blood cells, Gram-negative bacilli, and a large amount of amorphous "debris". Culture of the urine gave a profuse growth of coliform bacilli.

Therapy.—It was thought at first that the curious appearance of the urine might have been due to a severe urinary infection with heavy bacilluria and treatment with streptomycin injections and triple sulphonamide (Sulphatriad) by mouth was commenced. Further examination of the stained urinary deposit showed long slender worm-like bodies which were identified as microfilariae (Fig. 2, opposite). In one specimen of freshly voided urine, active filarial larvae were seen, and later, after the patient was admitted to hospital, the parasites were found in the peripheral blood in smears taken during the night.

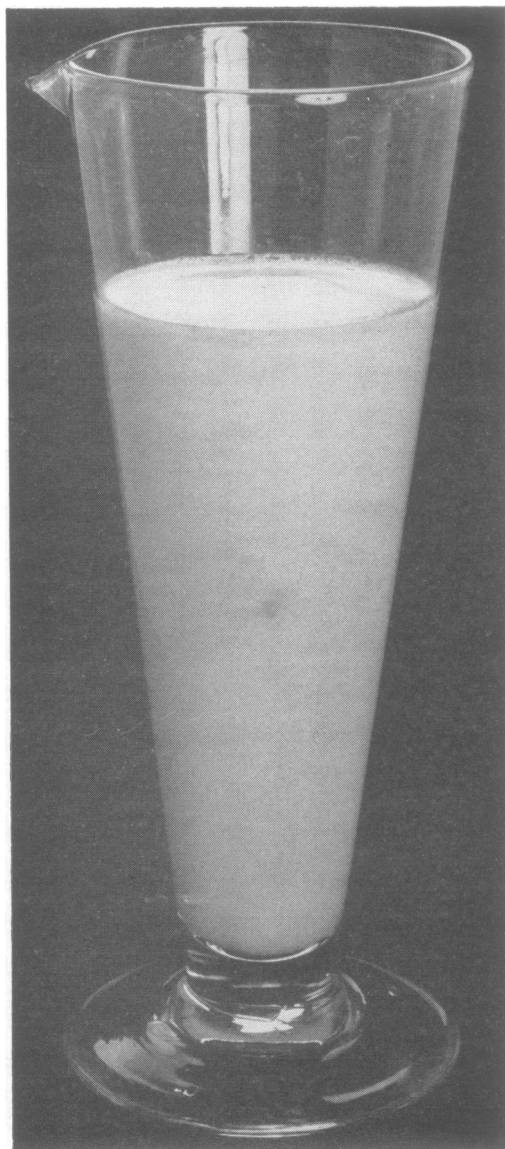


FIG. 1—Specimen of milky urine.

*Received for publication October 18, 1957.

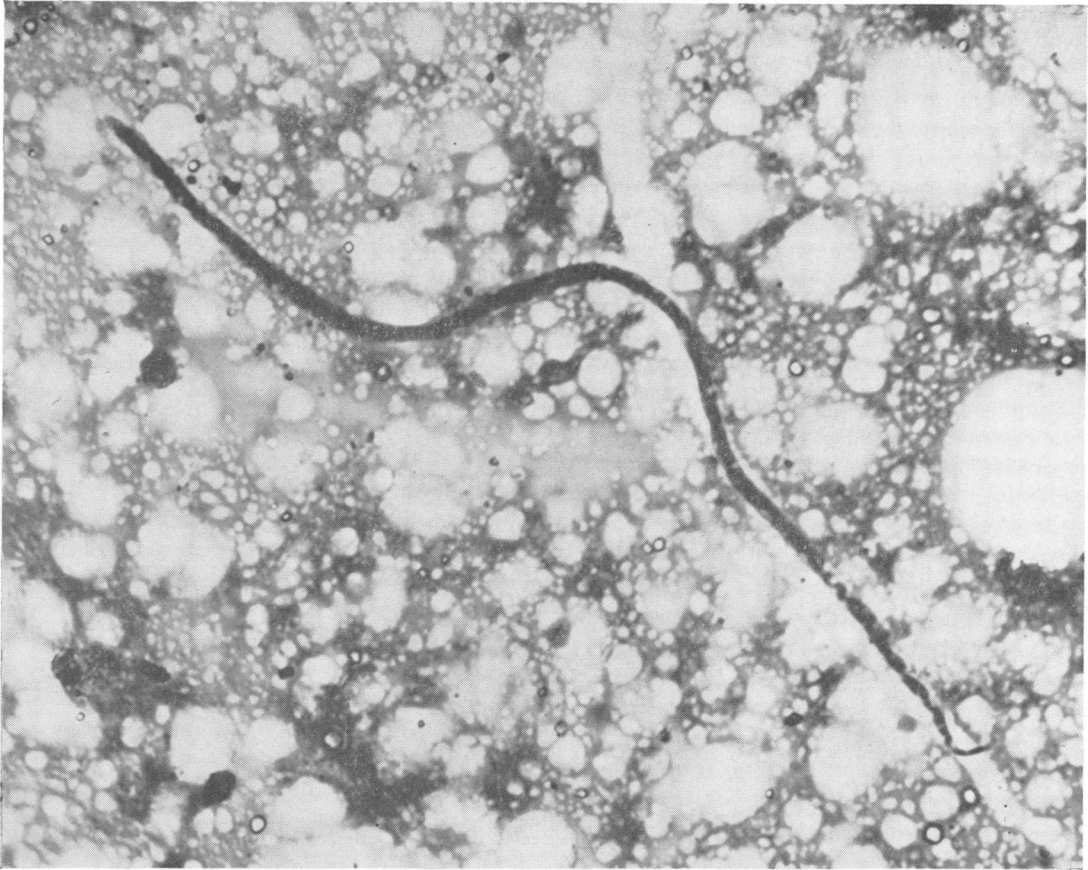


FIG. 2.—Microfilaria in urinary deposit.

Comment

Chyluria is an uncommon symptom. The milky-white urine may be cleared by the addition of ether, and microscopy shows many small globules of fat. The cause is obstruction of the thoracic duct with a consequent rise of lymphatic pressure, and eventual retrograde dilatation of the retroperitoneal and pelvic lymphatic channels. Eventually rupture of one of these dilated channels takes place into some part of the urinary tract. Bleeding is a frequent accompaniment, producing haematochyluria as in the present case. Obstruction of the thoracic duct in filariasis is due to the presence of numbers of adult

worms lodging in the duct or neighbouring channels and to the cellular reaction which results from their presence. Non-parasitic causes, *e.g.* malignant neoplasms, or chronic infection such as tuberculosis, are rare. Trauma and occasionally pregnancy may obstruct the duct.

Though filarial infestation is seldom encountered in the British Isles, it should be remembered that the incubation period of the disease is at least a year and that a considerable latent period may ensue before signs of infestation manifest themselves. With the increasing number of immigrants to England from areas where filariasis is endemic, further cases of the disease may be encountered.